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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,557	01/30/2004	W. Richard Chesnut	CSN	7084

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EXAMINER	
TSOY, ELENA	

ART UNIT	PAPER NUMBER
1762	

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/768,557	CHESNUT ET AL.	
	Examiner	Art Unit	
	Elena Tsoy	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) *1-36* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Election/Restrictions

Applicant's election with traverse of Group II, claims 37-55 in the reply filed on 11/02/2005 is acknowledged. The traversal is on the ground(s) that the search and examination of inventions of Groups I and II would not place serious burden on the Examiner. This is not found persuasive because as shown by the Examiner, independent and distinct inventions of Groups I and II have acquired a *separate status in the art* because of their recognized *separate classification and divergent subject matter*, so that the search required for Group I would not require search for Groups II. Therefore, the search and examination of inventions of Groups I and II would place serious burden on the Examiner.

The requirement is still deemed proper and is therefore made FINAL.

Specification

1. The disclosure is objected to because of the following informalities: "that Patent" on page 7, line 18, seems to be incorrect because it is not clear to which of two cited Patents it applies.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 41, 43-45, 47-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Bressler et al (US 5,694,852).

Bressler et al disclose a method employing a coating head for dispensing a composition on a roll in order to make a rotogravure printing medium which includes a film coating that is selectively alterable to produce ink-retaining cells, wherein the method comprises the steps of: positioning said roll at said coating head in order to dispense said composition onto said roll with said coating head; rotating said roll about its axis while translating said roll axially past said coating head; and helically dispensing said composition onto said roll as a merging series of adjacent, self-leveling strip or bead portions, the adjacent strip or bead portions merging and self-leveling at and after deposition to produce a uniform, continuous coating of the plastic composition (See column 2, lines 15-21; column 15, lines 25-42; column 20, lines 14-24; column 21, lines 5-35).

As to claims 43-44, the plastic composition is applied to the printing roll or cylinder at room temperature (about 23^0C), while the printing roll or cylinder, prior to application of the plastic composition, may be *preheated* to a temperature of from about 23^0C to about 40^0C (See column 15, lines 12-17).

As to claim 45, Bressler et al disclose that said linear and said rotary driver are linked to work at dependent, proportional speeds (column 21, lines 5-35); and a heater positioned in proximity to said coating head in a position to heat said roll before receiving said composition from said coating head (column 15, lines 6-17), where it is considered said linear driver moves said carriage alongside said heater to said coating head. Bressler et al disclose initially curing the plastic composition film with UV (i.e. initially curing said composition film at a first station with an energy source at a primary energy flux density) **followed by** heating (i.e. secondarily curing

said composition film at said second station with an energy source at a secondary energy flux density) (See column 15, lines 42-44).

As to claims 47-48, Bressler et al disclose said coating head is adjustable to move said orifice along a discrete adjustment path that is radial relative to said roll (column 20, lines 20-24), wherein said adjustment path is considered to extend at an acute angle to vertical and wherein a source of compressed gas or the equivalent coupled to said source of composition for urging said composition through said metering pump (column 20, line 25 – column 21, line 4).

As to claim 49, Bressler et al disclose that the plastic composition is forced through a tube 48 and of orifice 50 (claimed tubular needle) onto the cylinder 12 at a pressure of from 8-60 psi (See column 21, lines 2-4). The tube 48 may be a **needle** (See column 20, lines 30-31).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 37-40, 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bressler et al in view of Guenther et al (US 3,246,054).

Bressler et al are applied here for the same reasons as above. Bressler et al further disclose a method of making a rotogravure printing medium which includes a member with a film coating that is selectively engraveable (i.e. alterable to produce ink-retaining cells) (See

column 2, lines 10-21), wherein the method comprises the steps of: depositing on the surface of printing roll or cylinder 12 a composition film of irreversibly curable plastic composition which is engraveable after curing to produce ink-retaining cells (See column 15, lines 39-51); initially curing said composition film with UV (i.e. initially curing said composition film at a first station with an energy source at a primary energy flux density) **followed by** heating (i.e. secondarily curing said composition film at said second station with an energy source at a secondary energy flux density) (See column 15, lines 42-44). The plastic composition is applied using an orifice 50 (claimed coating head) to a printing roll or cylinder while it rotates, so that a series of generally circular cross-sectional strips of the coating is formed upon the printing roll or cylinder (See column 15, lines 25-32). These strips of plastic composition, upon application to the printing roll or cylinder, self level and merge to become a continuous coating of substantially uniform thickness on the printing roll or cylinder (See column 15, lines 32-38). The cylinder 12 is mounted on a holder 14, which is horizontally slidable into and out of the plane of FIG. 1 along a fixed path. See column 20, lines 14-24.

Bressler et al fail to teach (i) moving said composition film *linearly* to a second station: (ii) partially curing said composition without surficially dimpling the composition film and secondarily curing said composition film at said second station with an energy source at a secondary energy flux density that is greater than said primary energy flux density.

As to (i), It is the Examiner's position that UV curing and heat curing can be arranged along the fixed path.

As to (ii), Guenther et al teach that partial curing by low intensity radiation of about I megarad at room temperature and not exceeding 130^0F and followed by complete heat curing at

250 to 300 ^{0}F achieves no blistering compared to one-step oven curing at high initial temperature (See column 1, lines 31-53; column 4, lines 41-51) or discoloration compared to one-step high dose radiation curing (See column 2, lines 66-68).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used low intensity radiation followed by high temperature curing in Bressler et al with the expectation of providing the desired prevention of blistering or discoloration, as taught by Guenther et al.

6. Claims 46-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bressler et al.

Bressler et al are applied here for the same reasons as above.

As to claims 46, 51, 53, It is held that it is within the level of ordinary skill to operate a process continuously. In re Dilnot 138 USPQ 248 (CCPA 1963); In re Korpi 73 USPQ 229 (CCPA 1947); In re Lincoln 53 USPQ 40 (CCPA 1942). Therefore, sensing and controlling process parameters, which are required to carry out the process continuously, are within the level of ordinary engineering skill.

As to claim 50, Bressler et al disclose that the plastic composition has *viscosity* of from about 800 cP to about 5,000 cP. The plastic composition is applied at a *pressure* of from about 8 psi to about 60 psi, preferably at about 30 psi. See column 15, lines 1-5. It is well known in the art that flowability (viscosity) of a coating material can be improved by heating.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have heated a plastic composition in Bressler et al with the expectation of providing

the desired flowability (viscosity) of the coating composition depending on nature of the coating composition.

As to claim 54, Bressler et al disclose that prior to the application of the plastic composition to the printing roll or cylinder, the printing roll or cylinder may be pretreated by means of a plasma or corona pretreatment to clean and/or alter the surface (i.e., lower the surface tension) of the cylinder or roll for improved film or coating without and bonding strengths (See column 14, lines 23-28).

As to claim 55, Bressler et al disclose that while *engraving*, the air stream directs chips away from the support, or foot, of the diamond stylus, the cutting diamond, and the burr cutter in a direction toward a vacuum device, whereby the chips may be removed from the printing surface by the vacuum device located in the cutting head (See column 16, lines 1-3). Obviously, the vacuum device may be used to remove particles while cleaning.

7. Claim 52 rejected under 35 U.S.C. 103(a) as being unpatentable over Bressler et al in view of Narita et al (US 4,737,378).

Bressler et al are applied here for the same reasons as above. Bressler et al fail to teach a filter can be provided between a source of a coating composition and an orifice.

However, Narita et al teach that a filter can be provided between a source of a coating composition and an orifice (See column 4, lines 41-52) obviously to ensure a smooth and consistent coating composition.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a filter between a source of a coating composition and an orifice in Bressler et al between said source of composition and said orifice to ensure a smooth and consistent coating

composition to be dispensed onto a roll since Narita et al teach that a filter can be provided between a source of a coating composition and an orifice.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit 1762

January 5, 2006